"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOLPERT, A.R.

3001

621.396.671 : 621.317.79.083.7

Theoretical and Experimental Study of a Feeder Reflectometer.—A. R. Volpert. (*Radiotekhnika, Moscow*, Feb. 1947, Vol. 2, No. 1, pp. 5-11 In Russian, with English summary.) Construction and operation of an instrument for the measurement of the standing wave ratio in aerial feeders.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOLPERT, A. R.

54

1866
a

Efficiency coefficient of high frequency feeders.
VOLPERT, A. R. *Radiotekhnika*, 2, 22-4 (*Sept.-Oct.*, 1947) *In Russian.*—A general efficiency formula for coaxial feeders with low-loss dielectric is derived which is independent of the character of the applied load. Two nomograms are constructed which yield efficiency η in terms of the travelling wave coefficient κ and βl, and κ in terms of load parameters.

3

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

Vol'pert, A. R., and Potekhin, A. I. The diffractive field of a perfectly conducting sphere. Akad Nauk SSSR Zhurnal Eksper Teoret Fiz 17, 837 813 1947) (Russian)

An exact solution to the problem of the diffraction of plane electromagnetic waves by a perfectly conducting sphere was given by G Mie [Ann Physik (4) 25, 377-445 (1908)]. The present paper adds, in the most part in graphical form, computational results for the phase and amplitude of the distant diffracted field in the directions respectively opposite to and coincident with the direction of propagation of the incident wave.

P. H. Lanfoot

Source : Mathematical Reviews, Vol / No. /

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOLPERT, A. R.

621.396.671.4

2271. Radiation resistance of a vibrator surrounded by a magnetic dielectric spherical boundary. VOLPERT, A. R. *Radiotekhnika*, 3 (No. 6) 29–43 (1948) *In Russian.*—The influence of a spherical boundary with magnetic and dielectric properties on the radiation resistance of a Hertzian dipole is investigated by a strict mathematical analysis. It is shown how ε_1, ε_2, and μ_1, μ_2, and their ratios, i.e. $\varepsilon_1/\varepsilon_2 \gtrless$ or $= \mu_1/\mu_2$, affect the radiation resistance (ε_1 and μ_1 apply to the inner, ε_2 and μ_2 to the outer sphere). How higher μ in the surrounding sphere increases the rad. resistance and that μ has a larger effect than ε. The incremental change in radiation resistance is plotted for different values of $\varepsilon_1/\varepsilon_2$, assuming $\mu_1 = \mu_2$, and for μ_1/μ_2 with constant $\varepsilon_1 = \varepsilon_2$. A physical interpretation of the derived formulae is given, and methods are indicated extending the analysis to magnetic-dielectric boundaries of arbitrary shape.

A. L.

math
E.F.P.
Solid state
Magnetics

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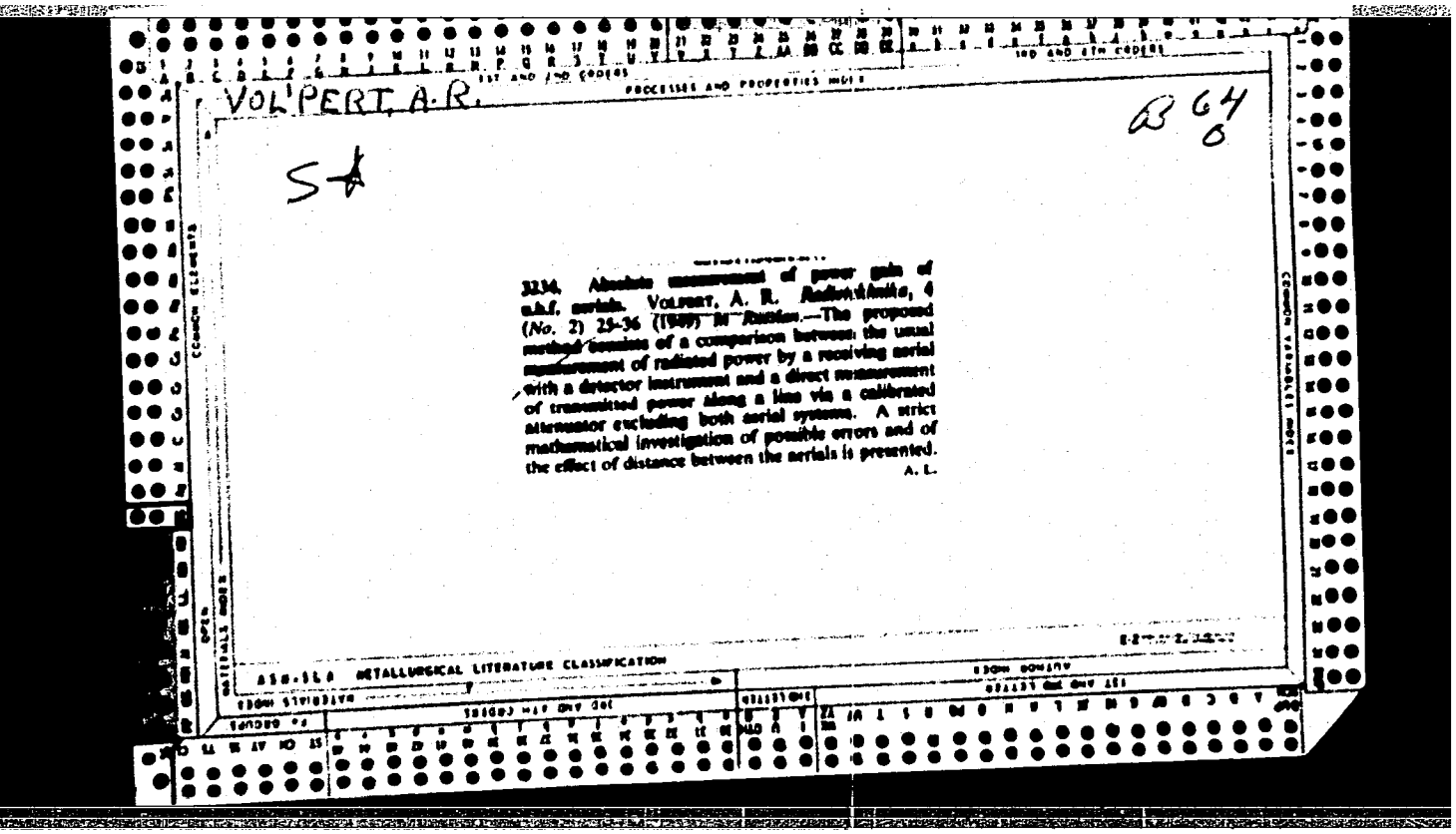

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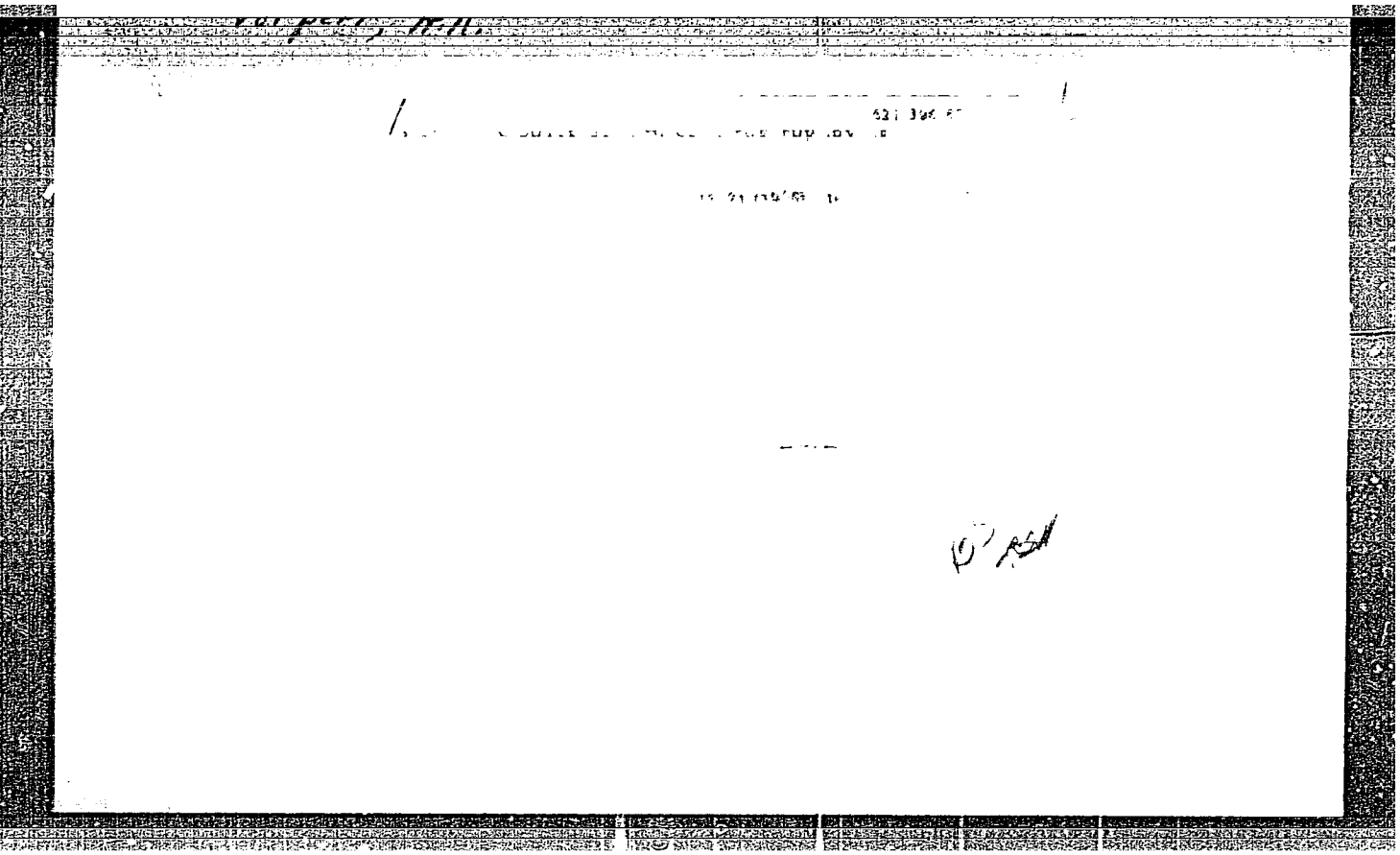

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

MINTS, A.L., akademik, glavnyy red.; BURDUN, G.D., red.; VOL'PERT, A.R., red.; GORON, I.Ye., red.; GUTENMAKHER, L.I., prof., red.; GRODNEV, I.I., red.; DEVYATKOV, N.D., red.; ZHEKULIN, L.A., red.; KATAYEV, S.I., red.; MEYMAN, M.S., red.; SIFOROV, V.I., red.; CHISTYAKOV, N.I., red.; GESSEN, L.V., red.izd-va; MARKOVICH, S.G., tekhn.red.

[One hundredth anniversary of the birth of A.S.Popov; jubilee session] 100 let so dnia rozhdeniia A.S.Popova; iubileinaia sessiia. Moskva, Izd-vo Akad.nauk SSSR, 1960. 312 p. (MIRA 14:1)

1. Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi. (Information theory)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

20069

S/108/61/016/003/001/006
B116/B205

9.1000 (and 1041, 1103, 1127)

AUTHOR: Vol'pert, A. R., Member of the Scientific and Technical Society for Radio Engineering and Electrocommunication

TITLE: The phase center of antennas

PERIODICAL: Radiotekhnika, v. 16, no. 3, 1961, 3-12

TEXT: The author gives the analytical form of the phase diagram in which the antennas have a phase center, and studies the properties of antennas without such a phase center. He offers simple examples of discrete and linear antennas, to which complicate constructions may be reduced. In his paper (Ref. 1: "Radiotekhnika, v. 1, no. 6, 1946), the author had first introduced the term phase center which he then but called "electric center". By phase center, that point is understood with respect to which the equiphase surface in the wave zone is a spherical surface. That means that the phase of the field in the point of observation does not depend on the angles θ and φ of the spherical coordinate system (or changes jumplike by 180°). Since the form of the phase diagram depends on the selection of the origin of coordinates, it is not

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The phase center of antennas

clear why in the general case the phase diagram depends on θ and φ. This is due to the absence of a phase center or to the shift of the origin of coordinates with respect to the phase center. The author derives the general formula for the phase diagram with the help of Figs. 1 and 2 (in Fig. 2 the origin of coordinates is shifted to the reading point): $\psi(\theta,\varphi) = A\cos\theta\cos\varphi + B\cos\theta\sin\varphi + C\sin\theta + D$ (4). A, B, C, D are constants that do not depend on θ and φ. Formula (4) is the general expression for the existence of a phase center. If, therefore, an antenna has a phase center, it is possible in the case of arbitrary θ and φ to find a point (ξ, η, ζ) independent of θ and φ, for which the following formula holds: $\psi(\theta,\varphi) - m(\xi\cos\theta\cos\varphi + \eta\cos\theta\sin\varphi + \zeta\sin\theta) = k$ (3). Here, k is a constant independent of θ and φ. $m = 2\pi/\lambda$, where λ denotes the wave length. From these two formulas, (3) and (4), the author obtains the coordinates of the phase center and those of k in the general form: $\xi = \frac{\lambda}{2\pi}A$; $\eta = \frac{\lambda}{2\pi}B$; $\zeta = \frac{\lambda}{2\pi}C$; $\varkappa = D$ (5). The above considerations referred to one component of the electric vector. Generally, however, there are two

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The phase center of antennas

such components, each is to be treated independently of the other. The result obtained is exemplified by means of a multi-element antenna with one phase center. In addition, the author studies an arbitrary antenna having a diagram without phase center and proves that such an antenna may be represented as a totality of two antennas whose diagrams have a phase center. Next, he studies phase diagrams of two-element antennas. The author proves that such antennas may have coinciding phase centers though the resulting phase center of the antenna need not coincide with the centers of the antennas. Linear antennas are well suited for the approximation of complicated constructions, and therefore, based on Fig. 6, the author derives the following formula for the phase diagram of a linear antenna:

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The phase center of antennas

$$\psi(0) = \operatorname{arc\,tg} \frac{\int_{-\frac{l}{2}}^{\frac{l}{2}} K(z) \sin[\beta(z) + mz \sin 0]\, dz}{\int_{-\frac{l}{2}}^{\frac{l}{2}} K(z) \cos[\beta(z) + mz \sin 0]\, dz} . \quad (21)$$

(21).

From this formula, it may be seen that a linear antenna has only then a phase center if the integrand is an odd function of the variable z with respect to either the numerator or the denominator. The condition for the existence of a phase center for linear antennas reads as follows: $\beta(z) = \begin{cases} -\beta(-z) \\ \text{const} \end{cases}$, $K(z) = \pm K(-z)$. The author mentions V. P. D'yakov,

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

MIKAELYAN, A.L.; VOL'PERT, A.R.; BURDUN, G.D.

All-Union conference of the A.S.Popov Scientific and Technical Society of Radio and Electronics. Radiotekhnika 16 no.11:74-78 N '61. (MIRA 14:10)

1. Rukovoditel' sektsii ferritovykh ustroystv SVCh Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi imeni Popova (for Mikaelyan). 2. Rukovoditel' sektsii antennykh ustroystv Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi imeni Popova (for Vol'pert). 3. Rukovoditel' sektsii radioizmereniy Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi imeni Popova (for Burdun).
(Radio) (Electronics)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, A.Ya.

Equivalence of absolute continuity in a narrow sense and Lipshits' condition for additive functions of sets. Izv. vys. ucheb. zav.; mat. no.3:23-26 '63. (MIRA 16:4)

(Functions, Continuous)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, A.Ya. (g. Slavyansk)

A generalization of the absolute continuity of a function. Izv. vys. uchab. zav.; mat. no.4:30-38 '64. (MIRA 17:9)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, A.Ya.

Case of generalization of Dini's derivative numbers. Trudy Mat. inst. AN Gruz. SSR 27:71-83 '60. (MIRA 15:3)
(Topology)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

S/070/60/005/004/011/012
E132/E360

AUTHORS: Bashuk, R.P., Vol'pert, E.G. and Tsigler, I.N.

TITLE: Annealing Boules of Synthetic Corundum

PERIODICAL: Kristallografiya, 1960, Vol. 5, No. 4, p 643

TEXT: Crystals of synthetic corundum, grown by the Verneuil process, and known as boules, have a considerable residual strain as a result of which they usually split in half longitudinally under a slight blow or scratch. In most cases, the six-fold axis of the corundum coincides with the axis of the boule. Only half boules are normally used industrially and this limits the size of the objects which can be made. Trials of annealing as a method of removing such strains have been made and these have proved successful, enabling plate to be cut freely parallel and perpendicular to the optic axis of the crystal. There are 1 figure and 1 Soviet reference.

SUBMITTED: March 22, 1960

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

BASHUK, R.P.; VOL'PERT, E.G.; TSIGLER, I.N.

Annealing of synthetic corundum crystals. Kristallografiia 5 no.4: 643 Jl-Ag '60. (MIRA 13:9)

(Corundum)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

s/055/59/000/06/03/027

AUTHOR: Vol'pert. E.G.

TITLE: On the Consideration of the Gas Elasticity in Vibration Devices

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1959, No. 6, pp. 37-42

TEXT: In (Ref.1) the author considered the oscillations of a piston which arise by the elasticity of the enclosed gas volume. Isothermic compression was assumed in (Ref.1). In the present paper it is assumed that the compression is polytropic. The author determines approximately the frequency and amplitude of the oscillations of the piston which are assumed to be sinusoidal, where the first approximation agrees with the result of (Ref.3), while in the next approximation the time of oscillation is expressed by elliptic integrals. If especially the polytropic exponent is $\gamma = 1.5$, then a strong expression can be given for the time of oscillation. It is stated that the amplitude decreases with an increasing γ. There are 2 figures and 3 references: 2 Soviet and 1 American.

ASSOCIATION: Kafedra prikladnoy mekhaniki (Department of Applied Mechanics)

SUBMITTED: December 18, 1958

Card 1/1

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

16(1)
AUTHOR: Vol'pert, E.G. SOV/55-58-2-6/35

TITLE: On the Calculation of a Vibration Instrument With an Air Spring (K raschetu vibratsionnogo ustroystva s vozdushnoy pruzhinoy)

PERIODICAL: Vestnik Moskovskogo Universiteta, Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958, Nr 2, pp 41-46 (USSR)

ABSTRACT: The author investigates the air spring in a piston. The results essentially exist already in the paper of Suscholz [Ref 1]. However, the present investigation is more complete, theoretically more founded and is experimentally confirmed.
There are 3 figures, 2 tables, and 2 references, 1 of which is Soviet, and 1 American.

SUBMITTED: June 22, 1957

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VOL'PERT, E.G.

Letter to the editor. Vest. Mosk. un. Ser. 1:Mat., mekh. 19 no.3: 87-89 My-Je '64. (MIRA 17:6)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

AU

TITLE: Consideration of interaction of machine elements in determining reliability

SOURCE: Standartizatsiya, no. 7, 1964, 14-16

TOPIC TAGS: reliability, machine reliability, correlation

factory operation of the i-th and γ-th elements. If the distribution density of the i-th element tested individually is $f_i(t_i)$ and $f_i^*(t_i)$ in the distribution when tested in the group, then one can say

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ACCESSION NR: AP4047000

$$\lim_{t \to 0} f_i^*(t) = f_i(t).$$

The problem of finding the form of the distribution function from experimental data is [illegible], particularly in a multiple-element case. The use of the above equation is demonstrated only for the two-element case with one correlation [illegible] [illegible] formulas.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

MOL'PERT, E.G., inzh.

Automatic control of a high-temperature furnace. Mekh. i avtom.proizv. 15 no. 3:40-41 Mr '61. (MIRA 14:3)
(Furnaces, Heat treating) (Automatic control)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, E.G.

Design of a vibrating device with an air spring. Vest.Mosk.un. Ser.mat.,mekh.,astron.,fiz.,khim. 13 no.2:41-46 '58. (MIRA 12:2)

(Pneumatic machinery)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, E.D., inzh.

Pneumatic device for intermittent motion of pistons. Izbor. i rats. 3 no. 4:15 Ap '58. (MIRA 11:7)

(Pneumatic control)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, E.G.

Consideration of the elasticity of gas in vibrating apparatus. Vest.Mosk.us.Ser.mat.,mekh.,astron.,fiz.,khim. no.6:37-42 '59. (MIRA 13:10)

1. Kafedra prikladnoy mekhaniki Moskovskogo universiteta.
(Gases, Kinetic theory of)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, E.G., kand. tekhn. nauk

Taking into consideration the interrelation of machine units in determining the reliability. Standartizatsiia 28 no.7: 14-16 Jl '64. (MIRA 17:11)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

S/118/61/000/003/001/001
A161/A133

AUTHOR: Vol'pert, E. G., Engineer

TITLE: Automatic control for high-temperature furnace

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 3, 1961, 40 - 41

TEXT: The author describes an automatic program-controlled system developed by himself for gas-filled furnace with graphite heater intended for a maximum temperature of 2,500°C. The temperature is controlled by variation of the input voltage from a 25 kw АОСК (AOSK) autotransformer. The reversible motor of the autotransformer moves an arm over the contact field while the motor is started by two magnetic starters. Manual control of the starters is effected by push-buttons. The automatic control system includes a temperature pickup, a measuring instrument, a programmer, and a relaxation relay. The pickup is a ТЕРА-50 (TERA-50) telescope from the "РАПИР" ("RAPIR") radiation pyrometer. The pickup signal is received by a ЭПД-62 (EPD-62) electronic potentiometer. The amplified signal moves the motor coupled with the indicating hand and recording stilus. A contact roller coupled with the hand moves along a circular rheochord of the reference input element. Voltage is fed to the reference input element from the РУ5-01 (RU5-01) program

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A161/A133

Automatic control for high-temperature furnace

controller that is also fitted with a rheochord connected by a roller to a servo-motor. The temperature variation conditions are traced with ink on chart paper. A photo-head trades the operation graph. The mismatch signal of the two rheochords is amplified and commands the starter relays. Yet the relays cannot control the "more" and "less" starters directly, for the system would be unstable in view of the limited variation range of the AOSK autotransformer and the high difference between the furnace time constants. A relaxation relay is added for stability. It consists of two CГ-3C(SG-3S) stabilotrons, two PKH (RKN) relays, a capacitor block, and a rectifier. The capacitors are charged through the R resistor up to stabilotron ignition voltage. The stabilotrons with the relay windings form two discharge circuits. The regulator relay guides the discharge into either of the circuits. The RKN relay controls the magnetic starters through MKY-48 (MKU-48) intermediate relays. The relaxation relay is connected to the network through a voltage stabilizer. Thus the magnetic starters are switched and the furnace feed voltage is controlled by separate pulses. This raises the time constant of the system and makes it stable. The system is working with 7 - 10°C accuracy controlling a heat process with heating to 2,000°C holding on this point, and nonlinear cooling. Inconvenience is caused by the necessity to make corrections for

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

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A161/A133

Automatic control for high-temperature furnace

the nonlinearity of the reference input element when tracing the temperature program, for the potentiometer has a linear template. The TEPA-50 telescope is dependable, but it requires constant gas pressure in the furnace for considerable pressure fluctuations affect the output signal. A high-temperature light pipe eliminating the effect of pressure discontinuities is desirable, though these discontinuities are not frequent. The graphical control program is an advantage making the system suitable also for research in tests with various processes. There are 2 figures. [Abstracter's note: Essentially full translation].

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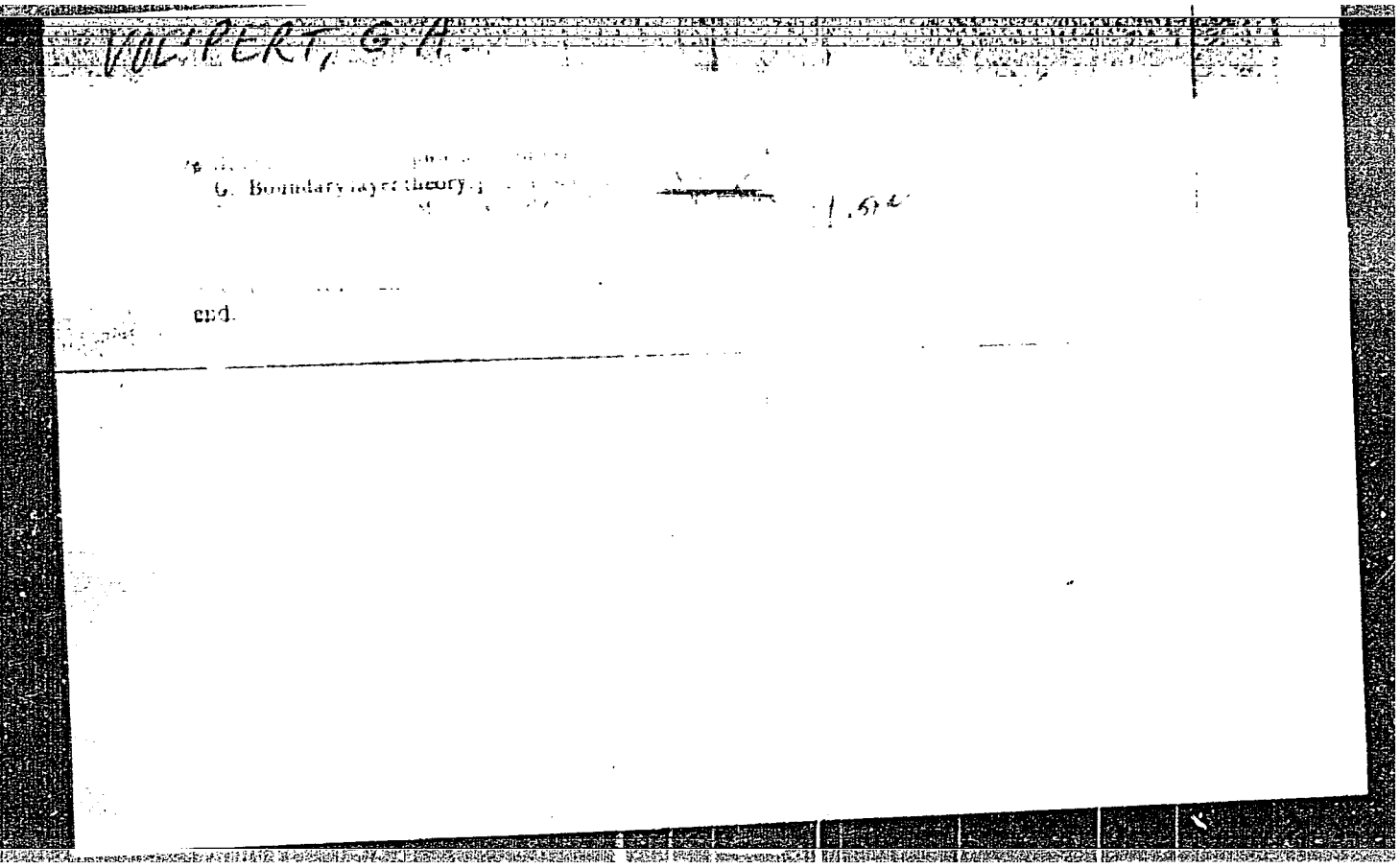

VOL'PERT, G.A.

G. Boundary layer theory.

1.5

end.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

SCHLICHTING, Hermann; VOL'PERT, G.A.[Translator]; AVDUYEVSKIY, V.S., redaktor; LIKHUSHIN, V.Ya., redaktor; GERMOGENOV, A.V., redaktor; BELEVA, M.A., tekhnicheskiy redaktor

[Boundary layer theory] Teoriia pogranichnogo sloia. Perevod s nemetskogo G.A.Vol'perta. Pod red.V.S.Avduevskogo i V.IA.Likhushina. Moskva, Izd-vo inostrannoi lit-ry, 1956. 528 p. (MLRA 9:6)
(Boundary layer)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, G. D.

Hard-surfacing of equipment parts in the building materials industry with wear-resistant alloys
Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1953. 286 p. (54-43432)

TS227.V65

1. Hard-facing

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

S/0122/64/000/002/0027/0029

ACCESSION NR: AP4015106

AUTHOR: Vol'pert, G. D. (Engineer)

TITLE: Reducing the hydrogenation of plated steel products in the course of electroplating

SOURCE: Vestnik mashinostroyeniya, no. 2, 1964, 27-29

TOPIC TAGS: hydrogenation, steel, plated steel, electrolytically plated steel, steel structure, phase transformation, temper brittleness, high tempering, low tempering, high frequency hardening, thermodiffusion

ABSTRACT: The effect of steel preparation (for subsequent electrolytic plating) on the degree of metal hydrogenation is discussed. The plastic deformation of metal, which follows such processes as metal cutting, polishing, etc., affects the intensity of hydrogen absorption. It was believed that this phenomenon could be controlled by modifying the technological conditions involved in various processes, and the following recommendations were made for the purpose of diminishing the hydrogenation in the surface layers of metals: 1) the metal should be polished before being hardened; 2) the metal hardening method should produce the least

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ACCESSION NR: AP4015106

possible austenite concentration and the fewest structural defects; 3) the high tempering of the hardened products should occur after the electrolytic coating, or a low tempering should be produced before and high tempering after the coating; 4) the temperature of metal for hydrogen removal should lie in the intervals at which no temper brittleness is produced; 5) compressive stresses should be introduced in the surface layer of steel. This can be achieved by high-frequency hardening or by thermodiffusion processing.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 12Mar64 ENCL: 00

SUB CODE: ML NO REF SOV: 000 OTHER: 000

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VOL'PERT, G.D.

PHASE I BOOK EXPLOITATION

AUTHOR: Vol'pert, G.D.

TITLE: Sprayed-Metal Coatings (Metallization) (Pokrytiya raspylennym metallom /metallizatsiya/)

PUB. DATA: Gosudarstvennoye izdatel'stvo literatury po stroitel'nym materialam, Moskva, 1957, 265 pp., 4000 copies

ORIG. AGENCY: None given

EDITOR: Tyutyunik, M.S.; Tech. Ed.: Pyatakova, N.D.

PURPOSE: This book is intended for maintenance personnel, designers, and process engineers at industrial establishments using and manufacturing various types of equipment.

COVERAGE: The author describes methods for repairing, reconditioning, and prolonging the service life of machine parts and other equipment by means of metal spraying. He also gives data on the properties of metal-coated items, conditions under which the metal can be sprayed on, and data on the spraying equipment. The appendices contain shop drawings of nonstandard equipment. The drawings

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Sprayed-Metal Coatings (Cont.)

can be used if necessary to produce a number of simple devices. The author expresses his thanks to Vol'pert, Ye. A., for assistance in compilation of materials and to Gvirts, R.A., for reviewing the book. There are 33 references, of which 32 are Soviet and 1 is English.

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VOL'PERT, G.D.

Coatings used for finishing operations. Trudy Sem. po kach. poverkh. no.3:236-240 '57. (MLRA 10:11)
(Metals--Finishing) (Protective coatings)

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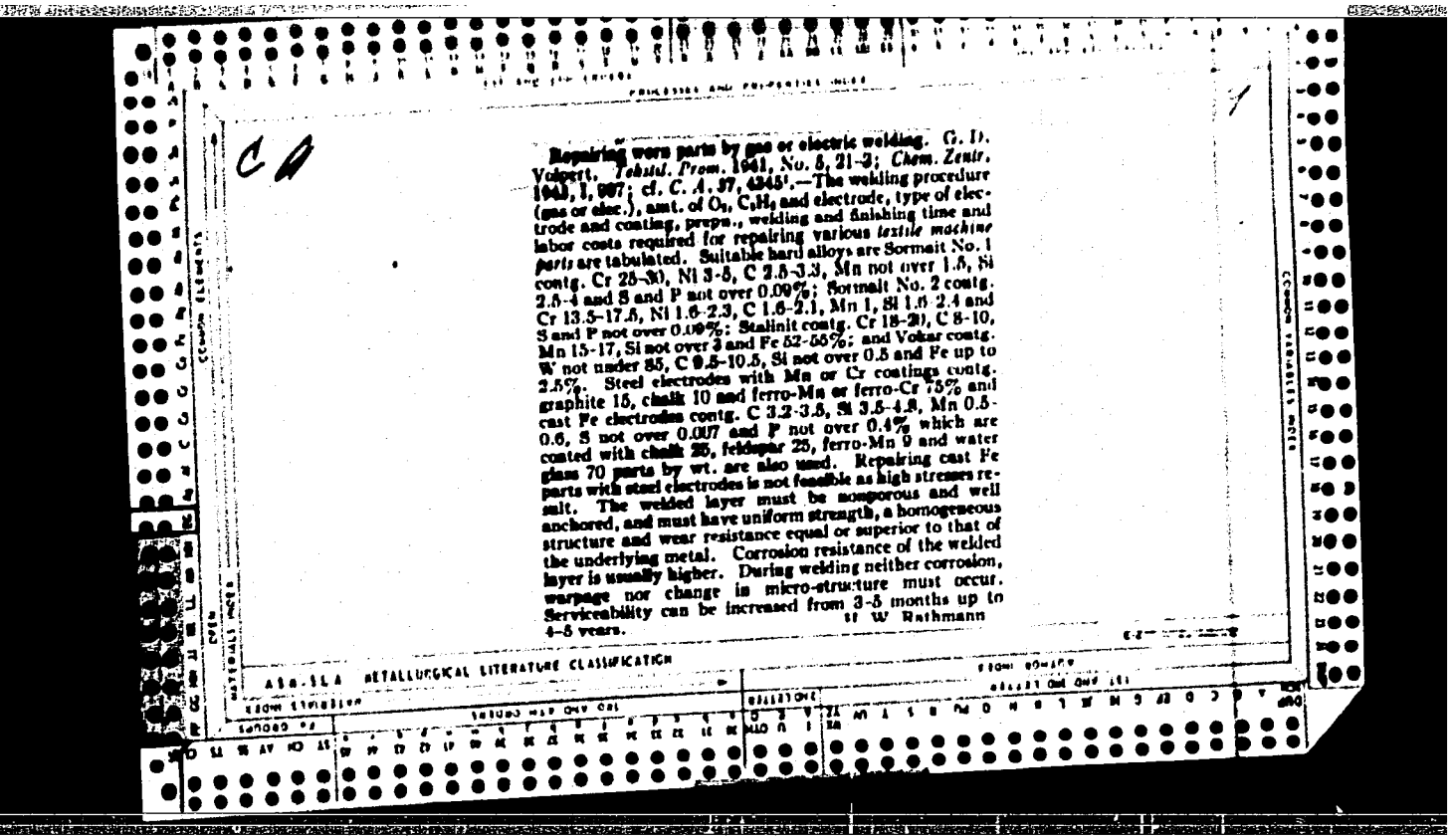

Repairing worn parts by gas or electric welding. G. D. Volgert. *Tekstil. Prom.* 1941, No. 5, 21-3; *Chem. Zentr.* 1943, I, 997; cf. *C. A.* 37, 4345¹.—The welding procedure (gas or elec.), amt. of O_2, C_2H_2 and electrode, type of electrode and coating, prepn., welding and finishing time and labor costs required for repairing various *textile machine parts* are tabulated. Suitable hard alloys are Sormait No. 1 contg. Cr 28–30, Ni 3–5, C 2.8–3.3, Mn not over 1.5, Si 2.5–4 and S and P not over 0.09%; Sormait No. 2 contg. Cr 13.5–17.5, Ni 1.6–2.3, C 1.6–2.1, Mn 1, Si 1.6–2.4 and S and P not over 0.09%; Stalinit contg. Cr 18–20, C 8–10, Mn 15–17, Si not over 3 and Fe 52–55%; and Vokar contg. W not under 85, C 9.5–10.5, Si not over 0.5 and Fe up to 2.5%. Steel electrodes with Mn or Cr coatings contg. graphite 15, chalk 10 and ferro-Mn or ferro-Cr 75% and cast Fe electrodes contg. C 3.2–3.5, Si 3.5–4.8, Mn 0.5–0.6, S not over 0.017 and P not over 0.4% which are coated with chalk 35, feldspar 25, ferro-Mn 9 and water glass 70 parts by wt. are also used. Repairing cast Fe parts with steel electrodes is not feasible as high stresses result. The welded layer must be nonporous and well anchored, and must have uniform strength, a homogeneous structure and wear resistance equal or superior to that of the underlying metal. Corrosion resistance of the welded layer is usually higher. During welding neither corrosion, warpage nor change in micro-structure must occur. Serviceability can be increased from 3–5 months up to 4–5 years.

H. W. Rathmann

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S/117/60/000/012/006/022
A004/A001

AUTHOR: Vol'pert, G. D.

TITLE: New Achievements in the Metal-Coating Field

PERIODICAL: Mashinostroitel', 1960, No. 12, pp. 22-23

TEXT: The author gives a report of the Scientific and Technical Conference on Metal Coating which was convened on May 19, 1960, in Moscow. The most outstanding experts on metal coating participated in the Conference. In his opening speech R. A. Noskin, Candidate of Technical Sciences, pointed out the technological, organization and material prerequisites necessary for the introduction of metal coating, and mentioned a number of difficulties slowing down the introduction of this advanced technology, e. g. the lack of calibrated wire and non-standardized equipment, as well as insufficient training of personnel. N. V. Katts, Candidate of Technical Sciences, presented new data on the technology of metal coatings and referred, in particular, to the prospects of obtaining compact and impermeable combined metal coatings and coatings of nonmetallic thermoplastic materials. He also elucidated the new method of obtaining scale-resistant cast iron (calorizing method) developed by the Moskovskiy tekstil'nyy institut (Moscow Textile Institute).

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New Achievements in the Metal-Coating Field

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A004/A001

The representative of the VNIIAvtogen, engineer Ye. V. Antoshin, reported on metal coating abroad and presented practical material on the use of plastic, high-melting and scale-resisting materials, oxides, carbides etc. The Senior Scientific Worker of Giproneftemash, R. A. Gvirts, reported on the application of metal and plastic coatings to fight corrosion in the oil and chemical industries. For operation in aggressive media he suggested to use apparatus and equipment made of metal-coated carbon steel instead of high-alloyed steel grades which are in short supply, and enumerates a number of coatings used in the oil and chemical industries, e. g. aluminum coatings, zinc-aluminum coatings on a zinc layer, coatings of powdered polyethylene, copolymers, polyethylene with polypropylene, fluoroplastic 3 and other synthetic materials. Professor L. V. Krasnichenko reported on the practice of obtaining pseudo-alloys for antifriction bearings. Based on the data of the Rostovskiy institut sel'skokhozyaystvennogo mashinostroyeniya (Rostov Institute of Agricultural Machine Building) he pointed out that copper-steel metal coatings containing 20% of copper, and copper-lead coatings with a 30% lead content are among the best antifriction materials. They can operate at sliding speeds of 3-4 m/sec and specific pressures of up to 400 kg/cm^2. Engineer S. A. Zalis read a report on the application of metal coating to increase the scale resistance of large-size welded housings of exhaust fans, gas turbines and other articles at the Nevskiy mashinostroitel'nyy zavod im. V. I. Lenina (Nevskiy Mechanical Engineer-

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New Achievements in the Metal-Coating Field

ing Plant im. V. I. Lenin). D. G. Vadivasov read a report on new theoretical investigations of the metal-coating process carried out by the Saratovskiy institut mekhanizatsii sel'skogo khozyaystva (Saratov Institute for the Mechanization of Agriculture). Engineer V. P. Yartsev reported on the fact that the Podolskiy mekhanicheskiy zavod im. M. I. Kalinina (Podolsk Mechanical Plant im. M. I. Kalinin) had saved in 1959 102 tons of steel, 30.2 tons of cast iron and 5.2 tons of bronze, i. e. a total of 330,000 rubles, in the reconditioning of 1,192 parts by metal coating. Engineer A. K. Vorob'yev gave a report on the practice of introducing metal coating at the avtozavod im. Likhacheva (Automobile Plant im. Likhachev), where press shaft journals, bushings and shafts of upsetting machines, spindles and many other parts are metallized. Engineer G. D. Vol'pert mentioned some peculiarities of metallization in comparison with other kinds of coatings. He also reported on some new coating methods and pointed out that after heat-treatment of nickelsulfate coatings it is possible to obtain parts whose microhardness of the surface layer attains 1,270 kg/mm^2. Lately it was made possible to obtain electrolytic iron coatings with an increased carbon content of up to 1% and more, even with manganese additions. Iron is considered to offer some favorable prospects in the field of electrolytic coatings in view of the use of raw materials which are not in short supply and because of its high deposition rate (up to 1 mm per

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New Achievements in the Metal-Coating Field

hour). Moreover, the technological process of iron coating is rather simple. It was emphasized that materials which are used for spray coating, e. g. steel, copper, zinc, aluminum, lead, cadmium etc., during the coating process acquire better service properties than the initial materials possess, i. e. porosity, hardness and antifriction properties. By the spray-coating method it is possible to apply metal layers in the range of 0.03 - 10 mm, while electrolytic coatings are more expediently used for thin coats. Electric-pulse building up should be used only for parts operating with stable loads, since internal defects and non-uniform hardness might result in the course of the plating process.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, G. D.

Determining efficient service life of machine parts. Mashinostroitel' no.10:10 O '62. (MIRA 15:10)

(Machine tools) (Mechanical wear)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, G.D. TYUTYUNIK, M.S., redaktor; PYATAKOVA, M.D., tekhnicheskiy redaktor

[Plating by means of pulverized metals; metalization] Pokrytiia raspylennym metallom [Metallizatsiia). Moskva, Gos.izd-vo lit-ry po stroit. materialam, 1957. 265 p. (MLRA 10:10)
(Metal spraying)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, G.D.

BENUA, F.F., kandidat tekhnicheskikh nauk; VOL'PERT, G.D., inzhener,; YEGEL'YANOV, N.P., kandidat tekhnicheskikh nauk; KLEKOVKIN, G.P. inzhener; KUZMAK, Ye.M., doktor tekhnicheskikh nauk, professor; NILOVSKIY, I.A., laureat Stalinskoy premii;PANOV, B.N., inzhener; POKHODNYA, I.K., inzhener; FRUMIN, I.I., kandidat tekhnicheskikh nauk; FRUMIN, S.R., inzhener; ZVEGINTSEVA, K.V., inzhener, redaktor; GOLOVIN, S.Ya., inzhener, redaktor; MATVEYEVA, L.S., redaktor; SOKOLOVA, T.F., tekhnicheskiy redaktor.

[Automatic built-up welding with wear-resistant alloys] Avtomaticheskaia naplavka iznosoustoichivymi splavami. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1955. 244 p.(MLRA 8:11)
(Electric welding)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, G. D.

VOL'PERT, G.D.; BERG, T.V. retsenzent; RYABTSEV, V.A., redaktor; PANOV, B.N., retsenzent.

[Hard-surfacing of equipment parts in the building materials industry with wear-resistant alloys] Naplavka iznosoustoichivymi splavami detalei oborudovaniia promyshlennosti stroitel'nykh materialov. Moskva, Gos. izd-vo lit-ry po stroitel'nym materialam, 1953. 286 p. (MLRA 7:8)
(Hard facing)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, G.D., inzh.

Reducing hydrogen content in steel articles reserved for electroplating. Vest.mashinostr. 44 no. 2:27-29 F '64. (MIRA 17:7)

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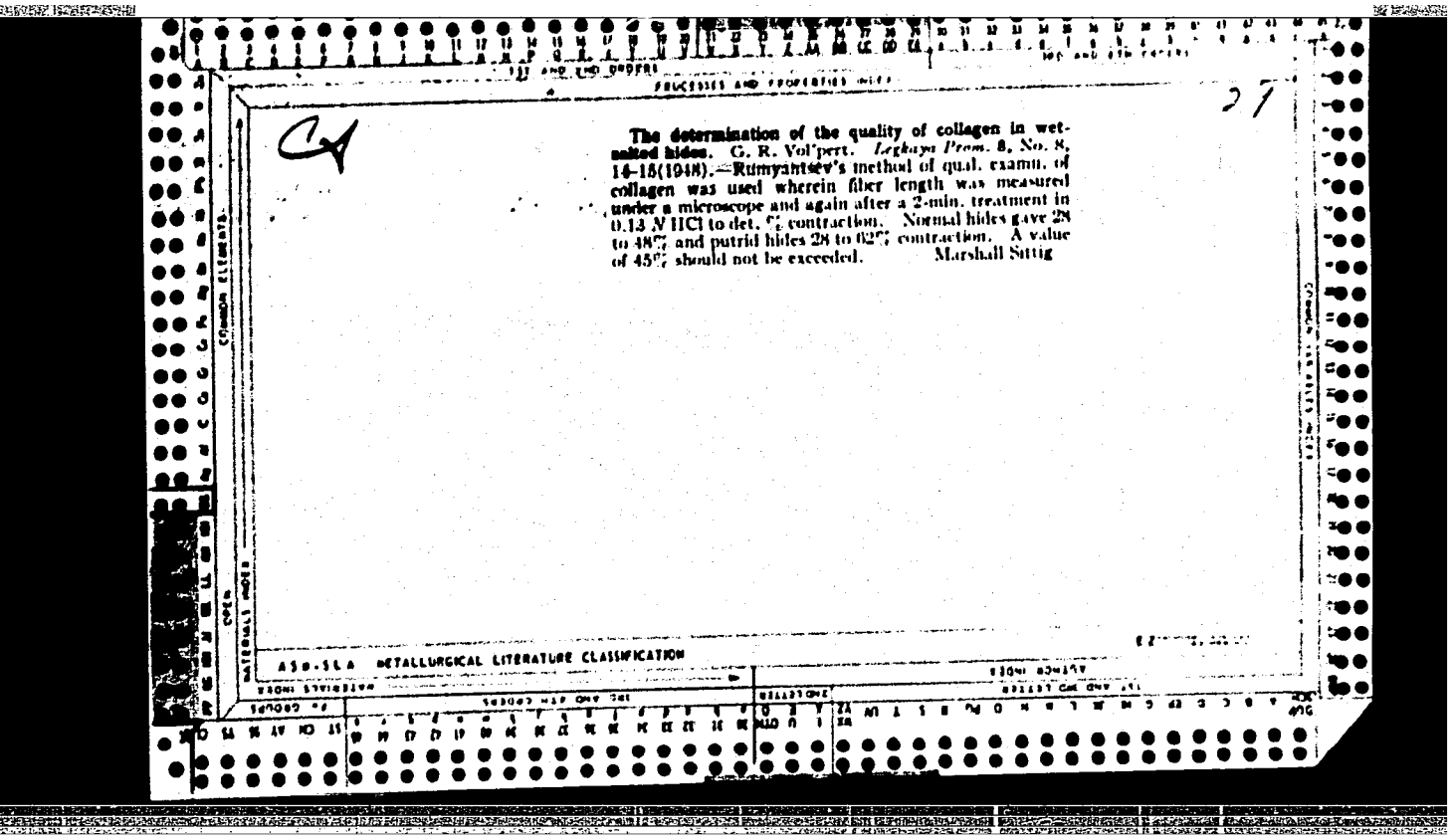

The determination of the quality of collagen in wet-salted hides. G. R. Vol'pert. *Legkaya Prom.* 8, No. 8, 14–15(1948).—Rumyantsev's method of qual. examn. of collagen was used wherein fiber length was measured under a microscope and again after a 2-min. treatment in 0.13 *N* HCl to det. % contraction. Normal hides gave 28 to 48% and putrid hides 28 to 62% contraction. A value of 45% should not be exceeded. Marshall Sittig

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VOL'PERT, G.R., kand. tekhn. nauk; ZAKHAROV, V.D.

Method for hide depilation without the use of lime. Kozh. obuv. prom. 6 no.6:26-29 Je '64. (MIRA 17:9)

1. Glavnyy inzh. Ul'yanovskogo kozhevenno-obuvnogo kombinata (for Zakharov).

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VOL'PERT, G.R., kand.tekhn.nauk

Liming. Nauch.-issl. trudy TSNIKP no. 30:52-59 '59. (MIRA 14:5)

(Leather)

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VOL'PERT, G.R., kand.tekhn.nauk

Control of the liming process. Kozh.-obuv.prom. 4 no.2:27-31 F '62. (MIRA 15:4)

(Hides and skins)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, G.R.; SHAPIRO, A.Ye.

Scientific substantiation of the methods of liming skins for manufacturing upper chrome leather. Leg.prom. 18 no.10:22-25 O '58. (MIRA 11:11)
(Tanning)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, G.R., knnd.tekhn.nauk

Effect of lime liquors on the collagen of pig and calf skins. Leg. prom. 18 no.4:22-24 Ap '58. (MIRA 11:4)
(Tanning)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

Vol'Pert G.R.

VOL'PERT, G.R., kand. tekhn. nauk; MARKICHEV, I.I.

Liming hides for Russian leather in a worm-conveying apparatus. (MIRA 11:1)
Leg. prom. 17 no.12:22-24 D '57.

1. Glavnyy inzhener Leningradskogo kozhevennogo zavoda "Marksist."
(Leather)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOLPERT, G. R.,
M. S. LYUKSEMBURG, Tsentral. Nauch. -Issledovatel. Inst.
Kozhevenno-Obuvnoi Prom., Sbornik Rabot No. 11, 39-[illegible] (1940)

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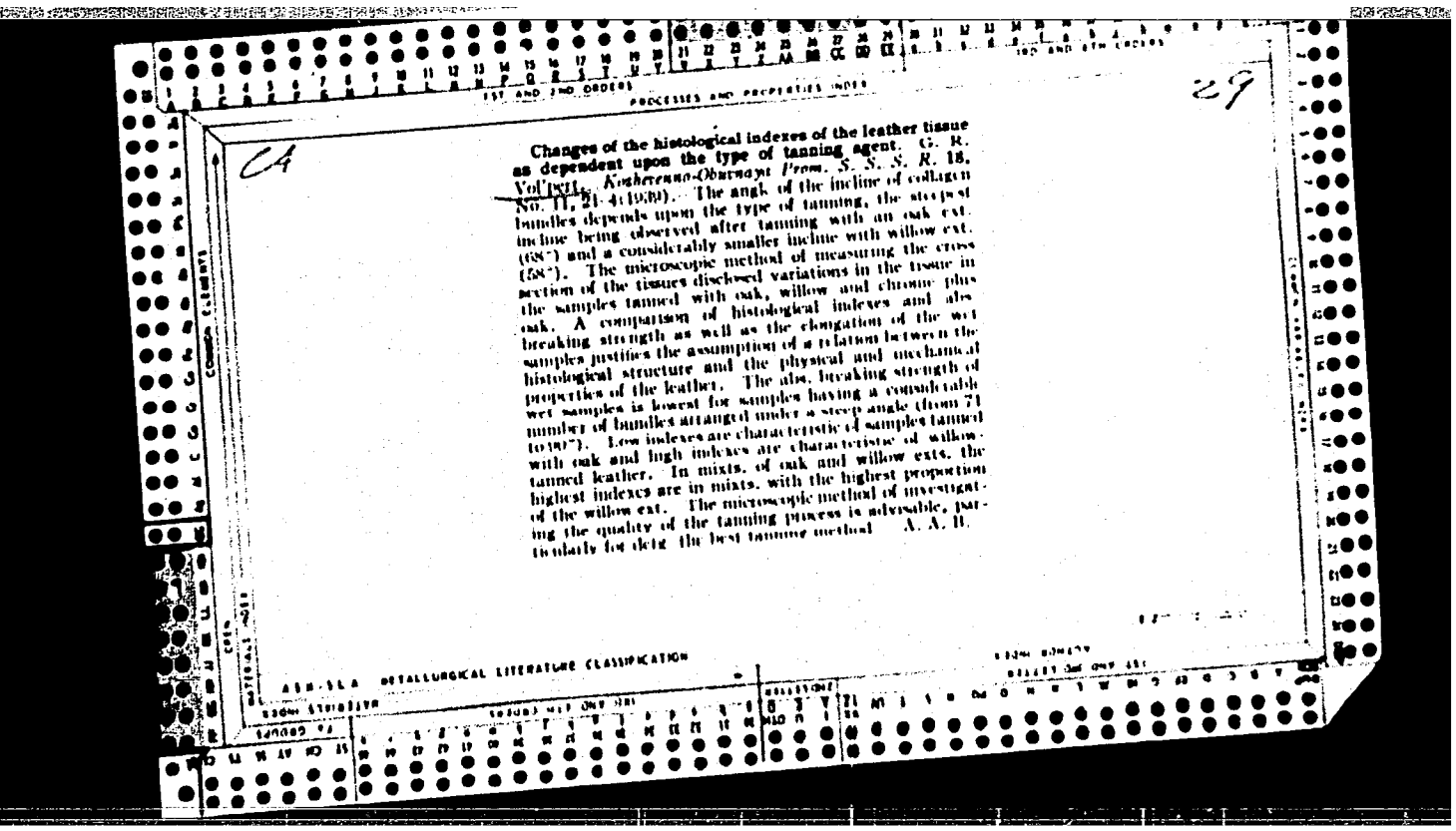

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Changes of the histological indexes of the leather tissue as dependent upon the type of tanning agent. G. R. Vol'pyan, *Kozhevenno-Obuvnaya Prom. S. S. S. R.* 18, No. 11, 21-4 (1958). The angle of the incline of collagen bundles depends upon the type of tanning, the steepest incline being observed after tanning with an oak ext. (68°) and a considerably smaller incline with willow ext. (58°). The microscopic method of measuring the cross section of the tissues disclosed variations in the tissue in the samples tanned with oak, willow and chrome plus oak. A comparison of histological indexes and also breaking strength as well as the elongation of the wet samples justifies the assumption of a relation between the histological structure and the physical and mechanical properties of the leather. The abs. breaking strength of wet samples is lowest for samples having a considerable number of bundles arranged under a steep angle (from 71 to 90°). Low indexes are characteristic of samples tanned with oak and high indexes are characteristic of willow-tanned leather. In mixts. of oak and willow exts. the highest indexes are in mixts. with the highest proportion of the willow ext. The microscopic method of investigating the quality of the tanning process is advisable, particularly for deig the best tanning method A. A. H.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

Vol'Pert, I. E.

USSR/Medicine - Dream phenomena

Card 1/1 : Pub. 86 - 5/38

Authors : Mayorov, F. P. and Vol'pert, I. E.

Title : Sleep and dreams

Periodical : Priroda 43/12, 42-50, Dec 1954

Abstract : The theory is accepted as basic that sleep is caused by the accumulation in the blood of certain substances that are destroyed and eliminated during sleep, but that a special center in the brain, the third ventricle, determines the state of sleeping or waking. This is based on the fact that an inflamed condition is observed in the walls of this cavity in persons suffering from sleeping sickness, and that by electrically stimulating this part sleep can be produced. Experiments in producing sleep in dogs are described. The author finds that an inhibiting force, that can be caused by various outside stimuli, spreads over the outer covering on the brain and that dreams are simply a chaotic releasing of brain-cell sequences. Diagrams; graphs.

Institution : .....

Submitted : .....

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ZAK, I.Z.; VOL'PERT, I.R.

Automatic regulation of neutralization by using an electron potentiometer. Med.prom. no.3:13-15 Jl-S '55. (MLRA 9:12)

1. Moskovskiy khimiko-farmatsevticheskiy zavod imeni Karpova.
(APPARATUS AND INSTRUMENTS,
prod. in Russia, use of electron potentiometers in indust. producing med. appar.)

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VOL'PERT, I.Ye.

Experimental investigation of dreams. Priroda 45 no.4:76-78 Ap '56. (MLRA 9:7)
(Dreams) (Hypnotism)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, I.Ye.

Medicinal treatment of obsessive and phobic states. Vop. psikh. i nevr. no.9:406-410 '62. (MIRA 17:1)

1. Klinicheskaya psikhonevrologicheskaya bol'nitsa imeni I.P. Pavlova (glavnyy vrach - L.I. Maricheva, nauchnyy rukovoditel' - prof. N.A. Kryshova), Leningrad.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, I.Ye.

Problems and methods of mass mental hygiene propaganda. Vop.psikh. i nevr. no.7:440-446 '61. (MIRA 15:8)
(MENTAL HYGIENE) (HEALTH EDUCATION)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, I.Ye.

Physiological foundations of psychotherapy; planning of the psychotherapeutic process. Trudy Inst. fiziol. 7:58-62 '58. (MIRA 12:3)

1. Sektor nevrozov i organicheskikh zabolevaniy nervnoy sistemy (zav. - N.A. Kryshova) Instituta fiziologii im. I.P. Pavlova AN SSSR. i Psikho-nevrologicheskaya bol'nitsa im. Pavlova Sverdlovskogo rayona g. Leningrada (glavnyy vrach - L.I. Maricheva).
(PSYCHOTHERAPY)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

MAYOROV, F.P.; VOL'PERT, I.Ye.

Sleep and dreams. Priroda 43 no.12:42-50 D '54. (MLRA 8:1)
(Sleep) (Dreams)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

S/123/61/000/018/015/015
A004/A101

AUTHOR: Vol'pert, M. I.

TITLE: From the practice of using the automatic BA-56 (VA-56) altimeter

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 18, 1961, 20, abstract 18 Zh177 ("Geod. i kartografiya", 1960, no. 9, 47-53)

TEXT: The author analyzes the practice of using the automatic VA-56 altimeter in field work for geomorphological and geological investigations. It is pointed out that the device was mounted on the GAZ-69 (GAZ-69) truck during the whole working period (45-50 days) which made it possible to carry out methodical runs with an efficiency of 18 km/hour, which, taking into account tying in and identification, made it possible to cover 60 - 65 km during a 7-hour working day. It is emphasized that the device during all this time operated entirely stable. It is suggested to replace some elements by small-size ones to place the device units in a more compact way in the truck cabin. To facilitate tying in, a permanent bracket for fasting a leveling instrument should be mounted on the truck. The necessity is pointed out of developing, for geomorphological and laying-out work, a unified three-coordinate device, making use of the VA-56 altimeter and

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S/123/61/000/018/015/015
A004/A101

From the practice of using ...

the GAZ-69 TM tying-in truck, to determine the coordinates along the motion path. In this device the azimuth of the direction of motion is measured from the initial direction by which the gyroscope is oriented, while the magnitude of the distance covered is determined from the number of wheel revolutions (speedometer).

R. Skulkova

[Abstracter's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, M.I.; RIKHTER, V.G.

Some problems in geology solved by means of leveling. Geod. i kart. no.2:23-27 F '64. (MIRA 17:3)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

S/006/60/000/009/005/006/XX
B012/B060

AUTHOR: Vol'pert, M. I.

TITLE: Experience Gained From the Use of the Automatic Altimeter BA-56 (VA-56)

PERIODICAL: Geodeziya i kartografiya, 1960, No. 9, pp. 47-53

TEXT: The kompleksnaya yuzhnaya (nyne kompleksnaya neftegazovaya) geologicheskaya ekspeditsiya AN SSSR (Comprehensive Southern (Now Comprehensive Oil and Gas) Geological Expedition of the AS USSR) obtained an automatic altimeter BA-56 (VA-56) in the spring of 1959. This apparatus is accurately described in papers (Refs. in Footnote on p. 47). The expedition team used the apparatus for geomorphological and geological field tests, its precision being tested at the same time. A rational method of using the apparatus was also developed. Performance was at an average of 35 km/day, but can be raised to 80-90 km with proper planning. Table 1 shows the form of the record book. The two methods used for the operations are described. (1) A "coefficient K of systematic influence" is introduced. It takes account of the systematic error related to the

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"zero" of the apparatus, as well as all the errors due to electrical and mechanical elements. K was assumed to be constant, and the method of forward and backward traverses was applied to eliminate the error. These operations, which are carried out in two stages, were conducted as per Table 2, and results were tabulated therein. It may be seen from this table and from the numerous determinations of K in the field that this coefficient K does not remain constant during operation, but gradually changes proportionally to the distance covered. With double distance (forward and back) systematic errors accumulate. This accumulation is more closely examined here and it is shown that K_o and the growth ΔK are no linear functions. For these reasons, the "forward and back" method has been dropped in favor of the second method. (2) This method is defined as that of "the single traverse with repeated determination of K". K was determined at the starting point and then every 6-8 km as well as at the end of the traverse. It may be seen from the results collected in Table 3 that the systematic error was not eliminated, although reduced considerably (root-mean-square error was 5-6 cm per km). It is believed on the strength of experience gained that a combination of the two methods would allow accuracy to be increased up to 4-5 cm per km. Recommendations are made

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

Experience Gained From the Use of the Automatic Altimeter BA-56 (VA-56)

S/006/60/000/009/005/006/XX
B012/B060

regarding improvements in design, reduction of size, etc. The development of a standard three-coordinate instrument based on the VA-56 altimeter and the tying-in apparatus ГАЗ-69-ТМ (GAZ-69-TM) is recommended. Furthermore, the author advocates the series production of the automatic altimeter described. There are 1 figure, 3 tables, and 1 Soviet reference.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

ACCESSION NR: AP4018052 S/0006/64/000/002/0023/0027

AUTHORS: Vol'pert, M. I.; Rikhter, V. G.

TITLE: Some geological problems that can be solved by level surveys

SOURCE: Geodeziya i kartografiya, no. 2, 1964, 23-27

TOPIC TAGS: tectonic movement, earth crust, structural form, uplift, depression, anticline, level survey, structural zone, data interpolation, data extrapolation

ABSTRACT: Classification of successively developing structural forms of the earth's crust can be established by running repeated level surveys of the denudation and accumulation surfaces. By this method the contemporary tectonic movements can be determined quantitavely, geological structure may be clarified, structural zones and related valuable deposits (oil, gas, etc) may be located. Repeated level surveys determine the direction and rate of vertical movements, as explained by M. I. Sinyagina, Yu. A. Meshcheryakov, A. A. Izotov, and others. The work consists of determining high-accuracy elevations along the established state survey grid lines and of repeating this process after a period of time. A comparison of the results provides definite answers to the problem of vertical movements. Studies already completed indicate a correlation between tectonic

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movements, thickness of deposits, and the nature of the foundation. When combined with geophysical studies, these survey studies also clarify the relations between the rate of vertical movements, gravity anomalies, magnetic field, etc. While traverses repeated after 30-70 years show elevation differences measurable only in centimeters over large regions, they also show much larger variations on local terraces and denudation surfaces. Low-accuracy and medium-accuracy rapid instruments should be used in the latter cases. The application of automatic altimeter determinations (as described by M. Vol'pert in Geodeziya i kartografiya, No. 9, 1960, and by M. Vol'pert and A. Chistyakov in Strukturno-geomorfologicheskiye issledovaniya v Prikaspii, 1962) has shown relative terrace movements (since 1959) of 1.5-1.8 m in the Oleynikovskoye and Promyslovskoye uplifts and of 5-6 m in the Prikumskiy region. The automatic altimeter determinations may be replaced by standard surveying, by trigonometric computations, and by barometric studies carried out along lines or polygons based on established bench marks. River terraces should be surveyed along both shores and should extend over at least 2 or 3 surfaces. Sea terraces should be surveyed completely around uplifts which formed islands in the periods of transgressions. Oscillatory movements can also be determined by level surveys along the fracture zones. This application is of a special practical importance because valuable deposits are often associated with

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such zones. In these studies level surveys should be carried across the faults, bench marks should be established 200 m apart, and measurements taken after each 2-3 months. High-accuracy surveys so conducted show oscillation amplitudes of 0.5-0.7 mm in 1 km. When repeated every month, they help in investigating hydrothermally and thermally caused crustal movements and may prevent structures from being placed across mobile zones. It has been suggested by several authors that such studies should be combined with gravimetric investigations. Although only the vertical components of crustal movements were discussed, the presently available equipment makes it possible to measure distances cheaply and rapidly. In the future, the horizontal components of movements will be measured, and the actual resultant displacements will be determined.

ASSOCIATION: none

SUBMITTED: 00	DATE ACQ: 19Mar64	ENCL: 00
SUB CODE: ES	NO REF SOV: 002	OTHER: 000

Card 3/3

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

L 32605-66 EWT(d)/EWT(m)/EWP(w)/EWP(t)/ETI/EWP(k) IJP(c) JD/HW/EM/RM/GD

ACC NR: AT6011748 SOURCE CODE: UR/0000/65/000/000/0028/0040

AUTHOR: Aleksandrov, A. Ya. (Doctor of technical sciences; Professor); Vol'pert, V. S.; Masalovich, I.I.

ORG: none

TITLE: Calculation of sandwich panels with a filler formed by cup-shaped stampings or rods

SOURCE: Raschety elementov aviatsionnykh konstruktsiy, vyp. 3: Trekhsloynyye paneli i obolochki (Calculation of aircraft construction elements, no. 3: Sandwich panels and shells). Moscow, Izd-vo Mashinostroyeniye, 1965, 28-40

TOPIC TAGS: sandwich structure, structure panel, shear modulus, bending strength, shell structure, structure stability

ABSTRACT: The calculation of sandwich panels with a filler formed by cup-shaped stampings or rods for bending strength and stability is achieved by means of formulas obtained for sandwich panels with a solid filler. The rigidity of the external layer, in which the stampings are made, is found as the reduced rigidity of a plate weakened by apertures and strengthened by soldered-on tubes. The rigidity of the external layer, to which the stampings are soldered, is determined as the reduced rigidity of a plate strengthened by washers and tubes. The problem of the determination of the reduced shear modulus of a filler and the calculation of external layers for local stability are examined in the present paper for the case when the spacing of the mesh is substantially greater than the diameter of the cup stamping. The

UDC 629.13.011.1:669-41:539.4

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

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ACC NR: AT6011748

authors study the reduced shear modulus for the case when the longitudinal forces compressing the external layers are small compared to the critical loads of local strength characteristics. The reduced shear moduli are determined experimentally. Orig. art. has: 13 figures, 1 table, and 22 formulas.

SUB CODE: 20 / SUBM DATE: 25Oct65

Card 2/2

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

ALEKSANDROV, A.Ya. (Novosibirsk); VOL'PERT, V.S. (Novosibirsk)

Applying a method of solving axisymmetrical problems in the theory of elasticity to the problem of a sphere and a space with a spherical hollow. Izv.AN SSSR.Otd.tekh.nauk.Mekh.i mashinostr. no.6:106-109 N-D '61. (MIRA 14:11)

(Elastic solids)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

UKHANOVA, N.V.; VOL'FERT, Ye.I. (Leningrad)

All-Union Conference of Surgeons, Traumatologists, and Anesthesiologists. Vest.khir. 82 no.2:145-150 F '59.
(MIRA 12:2)

(ANESTHESIOLOGY)
(INTESTINES—TUMORS)
(FRACTURES)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

SHRAYBER, M.G., prof.; VOL'PERT, Ye.I., starshiy nauchnyy sotrudnik;
UKHANOVA, N.V., starshiy nauchnyy sotrudnik

Some problems in the prevention and treatment of traumatic shock.
Vest.khir. 85 no.11:69-75 N '60. (MIRA 14:2)

1. Iz laboratorii eksperimental'noy khirurgii (zav. labor. - prof. M.G. Shrayber) Nauchno-issledovatel'skogo instituta skoroy pomoshchi im. Dzhavelidze (dir. - dots. S.N. Polikarpov).
(SHOCK)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, Ye.I., kand.med.nauk (Leningrad, 10-ya Sovetskaya ul., d.16, kv.16)

Diagnosis of lead colic in emergency surgical practice [with summary in English]. Vest.khir. 80 no.5:88-90 My '58 (MIRA 11:7)

1. Iz Nauchno-issledovatel'skogo instituta skoroy pomoshchi im. Yu.Yu. Dzhanelidze (dir. - dots. D.N. Fedorov, nauchnyy rukovoditel' prof. P.N. Napalokov).

(LEAD POISONING, complications,
colic, diag. in emergency surg. serv. (Rus))
(ABDOMEN, ACUTE, diagnosis,
lead colic, in emergency surg. serv. (Rus))

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, Ye.I.; GUREVICH, I.Ya.; KOTRAS, R.L.

Volumetric anesthesiac respirator ROM-1. Nov. med. tekh. no.3: 65-71 '65. (MIRA 19:1)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, Ye.I., kand.med.nauk

Use of syncol in the treatment of traumatic shock. Akt.vop.perel. krovi no.7:337-341 '59. (MIRA 13:1)

1. Leningradskiy nauchno-issledovatel'skiy institut skoroy pomoshchi im. I.I. Dzhanelidze.
(DEXTRAN) (SHOCK)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, Ye.I.

VOL'PERT, Ye.I., kand.med.nauk (Leningrad, 10-ya Sovetskaya ul., d.16, kv.16)

Perforation of a pyonephrotic kidney into the peritoneal cavity. Vest.khir. 79 no.12:95-96 D '57. (MIRA 11:1)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi im. Yu.Yu.Dzhanilidze (dir. - dotsent D.N.Fedorov, nauchnyy rukovoditel' - prof. P.N.Napalkov).

(NEPHROSIS, compl.
perf. of pyonephrotic kidney, surg.)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, Ya.I., kand. med. nauk; KULAGIN, V.K., dotsent; PETROV, I.R., prof.; UKHANOVA, N.V., kand.med. nauk; SHRAYBER, M.G., prof.; TAL'MAN, I.M., red.; KOSTAKOVA, M.S., tekhn. red.; KHARASH, G.A., tekhn. red.

[Traumatic shock] Travmaticheskii shok. Monografiiu sost.: E.I.Vol'pert i dr. Moskva, Medgiz, 1962. 239 p. (MIRA 15:4)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Petrov). (SHOCK)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, Ye.I.; YERSHOVA, I.N.; LAZAREVA, K.N.

Anesthesia in emergency surgery on organs of the abdominal cavity. Vest.khir. no.3:85-90 '62. (MIRA 15:3)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi im. Yu.Yu. Dzhanelidze (dir. - dotsent S.N. Polikarpov, nauchn. rukovod. - prof. M.S. Lisitsyn [deceased]).
(ABDOMEN—SURGERY) (ANESTHESIA) (MEDICAL EMERGENCIES)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

SHRAYBER, M.G.; VOL'PERT, Ye.I.; UKHANOVA, N.V.

Discussion on the articel "Theories of shock." Khirurgiia 37 no.4:137-139 '61. (MIRA 14:4)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni Yu.Yu. Dzhanelidze (dir. - dotsent S.N. Polikarpov). (SHOCK)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'FERT, Ye.I., kand.med.nauk

Hazard of the regurgitation of intestinal contents following the administration of cirariform preparations in acute intestinal obstruction and peritonitis. Khirurgiia 37 no.4:107-109 '61. (MIRA 14:4)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni prof. Yu.Yu. Dzhanelidze (dir. - dotsent S.N. Polikarpov, nauchnyy rukovoditel' - prof. A.N. Berkutov).
(INTRATRACHEAL ANESTHESIA) (MUSCLE RELAXANTS)
(CURARELIKE SUBSTANCES) (VOMITING)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PERT, Ye. I. (Leningrad)

Surgical treatment in poisoning from potassium permanganate crystals. Klin. med. no.6:148-149 '61. (MIRA 1/:12)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni I. I. Dzhanelidze (dir. - dotsent S. N. Polikarpov, nauchnyy rukovoditel' - prof. M. S. Lisitsyn)

(POTASSIUM PERMANGANATE--TOXICOLOGY)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PIN, Anatoliy Grigor'yevich; ZEYTLENOK, G.A., otv. red.; KOKORIN, Yu.I., red.

[Principal concepts and calculation of the reliability of a radio transmitter] Osnovnye poniatiia i raschet nadezhnosti radioperedatchika. Moskva, Sviaz', 1965. 93 p. (MIRA 18:8)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

L 47328-65 EWT(1)/EWA(h) Peb

ACCESSION NR: AP5010869 UR/0286/65/000/007/0041/0042

AUTHOR: Vol'pin, A. O.

TITLE: A device for the automatic detection of defects in radio electronic equipment. Class 21, No. 169589

SOURCE: Byulleten' izobretenly i tovarnykh znakov, no. 7, 1965, 41-42

TOPIC TAGS: defect indicator

ABSTRACT: This Author Certificate presents a device for the automatic detection of defects in radio electronic equipment. The device (see Fig. 1 on the Enclosure) performs by non-contact switching, and includes reference voltage and commutating voltage generators, a pulse counter, an indicator power supply source, a pulse distributor, a defect monitor, and an analyser. The device is designed to simplify the control of the direct current voltages between points of the network which are in different potentials above ground, to increase the control speed, and to combine the functions of the reference voltage and commutating voltage generators, of the pulse counter, and of the indicator power supply source. Ring-shaped, step-type distributors are used in the device. These distributors are connected to the rate pulse generator and are connected in series on the basis

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ACCESSION NR: AP5010869

of orders. The outputs of the distributors are loaded to a decimal indicator and a pulse distributor. The pulse distributor is connected to the defect monitors. The outputs of these monitors are connected through the analyzer to the control element of the rate pulses. Orig. art. has: 1 figure.

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut svyazi im. Professora M. A. Bonch-Bruyevicha (Leningrad Electric Engineering Communications Institute)

SUBMITTED: 05Dec63 ENCL: 01 SUB CODE: EC, IE

NO REF SOV: 000 OTHER: 000

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PIN, D., inzhener; KRIVONOGOV, K., inzhener.

Electric detonating machine. Mast.ugl. 3 no.11:24 N'54.
(Blasting) (MLRA 8:3)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

VOL'PIN, D.I., inzhener.

Let us introduce flashless blasting on a wider scale.
Bezop.truda v prom. 1 no.8:16-18 Ag '57. (MLRA 10:8)
(Blasting)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3

Volkov, D.I.

YAKHONTOV, Aleksey Dmitriyevich; VOLKOV, D.I., otvetstvennyy red.; BEKKER, O.G., tekhn.red.; NADEINSKAYA, A.A., tekhn.red.

[Work with explosives] Vzryvnye raboty. Moskva, Ugletekhizdat, 1957. 189 p. (MIRA 11:3)
(Explosives) (Blasting)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860720013-3"